

PROCEEDINGS OF LEARNED SOCIETIES.

ZOOLOGICAL SOCIETY.

May 26, 1857.—Dr. Gray, F.R.S., V.P., in the Chair.

ON THE ANIMAL AND BARK OF THE GENUS *ANTIPATHES*.

By DR. J. E. GRAY, F.R.S., F.L.S., V.P.Z. AND ENT. SOC. ETC.

In the 'Proceedings' of the Society for 1832, p. 41, I described for the first time the bark and animal of *Antipathes dichotoma* from Madeira.

It is to be observed that this species has been separated from the others of the genus because the surface of the axis is smooth and not covered with a number of minute, uniform, cylindrical spines like the true *Antipathes*, and has been called for that reason *Leiopathes*; and it has been further stated, that though *Leiopathes* has a distinct bark and animal like *Gorgoniadæ*, this may not be the case with the normal species of the genus, some of which have been described by Ellis as having a very peculiar kind of animal.

To set this question at rest, I have carefully examined all the specimens of *Antipathes* which have come under my observation, and have failed to discover any traces of a bark or remains of any kind of animal matter on their surface, until a few days ago, when Mr. Samuel Stevens brought to the Museum a very fine specimen of a long simple-stemmed *Antipathes* from the Seychelles, which appears to be a new species, allied to *A. spiralis*, if more than a very fine straight specimen of that species.

This specimen is entirely covered from near the expanded base to the apex (except at certain parts where the surface has been accidentally abraded) with a very distinct bark or animal covering.

The bark is continuous, completely hiding the spinules of the surface of the axis, smooth, and showing a number of thicker, browner, irregular-shaped plates on the surface, which are separated from each other in some places only by narrow crack-like grooves, and at others by a considerable distance; and there is no appearance, in the dry state, as far as I can detect, of any apertures for the emission of the heads of the polypes.

The bark in its dry state is tough and rather rigid; when soaked in water, it becomes thick, coriaceous externally, and fleshy within; when soaked in a solution of potash, the harder plates appeared to be formed of a rather convex horny plate of irregular shape and rather twisted on the surface, and the other part of the bark is scattered with groups of very small, uniform-sized, regular-shaped, oblong plates, of a somewhat similar consistence and colour.

The hard parts of the bark are quite distinct in form and appearance from the spiculæ of the *Gorgoniadæ*. They are hard and brittle, not soluble in strong muriatic acid, nor are they affected by a strong solution of caustic potash. They are most probably siliceous.

I have not been able to discover the tentacles of the animal, though I have submitted them to the same process by which I observed them in *Leiopathes dichotoma*, as mentioned in my former paper; but I have seen sufficient of the internal structure of the animal to lead me to believe that in its general character it agrees with the other *Gorgoniadæ*.

June 9, 1857.—Dr. Gray, F.R.S., V.P., in the Chair.

NOTE ON THE UPLAND GOOSE.

BY PHILIP LUTLEY SCLATER, M.A., F.L.S. ETC.

The new "Upland Goose" recently received by the Society from the Falkland Islands, is certainly the true Magellanic Goose (*Chloëphaga magellanica*), Gmelin's name *magellanica* being founded on Buffon's Pl. Enl. 1006—a sufficiently recognizable representation of what seems to be the female of this species. See also Darwin's Zool. of the Beagle, Birds, p. 134, where "Upland Goose" is stated to be the name applied to this bird at the Falklands.

The bird, which has for several years, I believe, bred in the Society's Gardens, and is commonly called the "Magellanic Goose," is "The Ashy-headed Goose" (*Chloëphaga poliocephala*) of the British Museum Catalogue of Gallinæ, Grallæ and Anseres, published in 1844.

This species is well figured in Gray and Mitchell's Genera of Birds (pl. 165), under the name *Bernicla inornata*. But it seems doubtful whether this is really the true *Anas inornatus* of King (Proc. Comm. Zool. Soc. i. p. 15).

The adults of both sexes of this Goose, which are now in the Society's Gardens, are coloured as nearly as possible alike, which is rather curious, if, as appears to be the case, in the nearly allied *C. magellanica* the male and female are quite different.

There are two other fine Geese which inhabit the southern extremity of the S. American continent—namely, *B. antarctica* (Gm.) and *B. melanoptera*, Eyton. Specimens of all these four species are in the British Museum.

DESCRIPTION OF A NEW GENUS OF GORGONIADE. BY DR. JOHN EDWARD GRAY, F.R.S., V.P.Z. & ENT. SOC., F.L.S. ETC.

ACANTHOGORGIA.

Coral branchy; branches free, cylindrical, slender, both of them almost entirely composed of transparent spicula; cells elegantly bell-shaped, contracted at the bottom, and less so rather below the aperture, spinulose, with eight equidistant lines of two or three series of diverging short spines; the mouth of the cell surrounded with numerous diverging, very slender, transparent, elongate spines, nearly as long as the cell. Axis horny, black, more slender and brown near the tips.

Acanthogorgia hirsuta, Proc. Zool. Soc. 1851, Radiata, pl. 3. fig. 2.

Coral branched; branches nearly on the same plane, separate.
Hab. Unknown. British Museum.

This genus bears some relation to *Primnoa*, but the cell is armed externally with rows of short, thin, and its mouth with a series of delicate, elongated bristle-like spines, instead of the broad scale of that genus. From all other genera of the family it is most distinct.

The MS. description of this very curious coral was accidentally mislaid at the time at which it was read, and did not appear in the printed Proceedings of the Society. It was figured, by an error of the artist, for and under the name of *Nidalia occidentalis* in the Proceedings of the Society for 1851.

June 23, 1857.—Dr. Gray, F.R.S., V.P. Zool. & Ent. Soc.,
 in the Chair.

DESCRIPTIONS OF TWELVE NEW OR LITTLE-KNOWN SPECIES
 OF THE SOUTH AMERICAN FAMILY FORMICARIIDÆ.
 BY PHILIP LUTLEY SCLATER, M.A., F.L.S. ETC.

1. GRALLARIA FERRUGINEIPECTUS.

Supra pallide brunnea, olivaceo induta: loris et regione oculari et auriculari fulvo tinctis: subtus flavicanti-ferruginea, collo antico medially et ventre toto cum crisso albis: alis nigricantibus pallido brunneo limbatis, tectricibus alarum superioribus omnino nigricantibus, inferioribus autem cum camptero ochraceis: rostri nigri basi flavicante: pedibus pallidis.

Long. tota 3·8, alæ 2·6, caudæ 1·2, tarsi ·85.

Hab. In Venezuela, in vicin. urbis Caraccas (Levaud).

Mus. Paris.

2. GRALLARIA LORICATA.

Supra olivacea: pileo castaneo: oculorum ambitu, loris et gula tota albidis, fulvo tinctis: stria duplici gutturis utrinque nigra: pectoris et ventris lateralis plumis omnibus medially fulvo-albidis, undique late nigro marginatis: ventre medio et crisso albis, hypochondriis brunnescentibus: rostro clare brunneo, basi flavida: tectricibus subalaribus pallide brunneis.

Long. tota 4·0, alæ 2·8, caudæ 0·8, tarsi 1·6.

Hab. In Venezuela, in vicin. urbis Caraccas (Levaud).

Mus. Paris.

These two *Grallariæ* are of smaller size and have shorter tarsi than the typical members of the genus. The bill also is shorter, broader, and more flattened, and furnished with many basal bristles. Together with Lafresnaye's *Grallaria nana*, they seem to form a subordinate group pointing towards *Conopophaga*.

3. HYPOCNEMIS MELANOPOGON.

♂. *Cinereus, subtus dilutior, ventre medio albicante; gula nigra: alis brunnescenti-nigris, tectricibus omnibus albo marginatis: cauda nigra rectricibus omnibus anguste albo terminatis: rostro nigro, pedibus fuscis.*

♀ aut ♂ junr. *Supra mari adulto similis, subtus gutture et pectore cinereo variegatis, gastræo albo, lateraliter cinerascentiore.*

Long. tota 4·5, alæ 2·5, caudæ 1·5.

Hab. In Peruvia Orientali, Chamicurros (*Hauxwell*).

Mus. Brit. et P. L. S.

This bird nearly resembles *H. pæcilonota* and *H. myiotherina* in style of colouring, but the bill is longer and more slender, and more like that of some of the species of *Myrmeciza*. From *H. pæcilonota* it is easily distinguished by the want of the white edgings of the interscapularies, from *H. myiotherina* by the restriction of the black colour to the throat, the want of the superciliary mark, and by the white termination of the rectrices.

I have two specimens of this species in my own collection, and there is one in the British Museum, which formed part of *Hauxwell's* collection from Chamicurros.

4. FORMICIVORA MELÆNA.

Fuliginoso-niger, subtus intensior; lateribus plumosis cum tectricibus subalaribus albis: alarum tectricibus et caudæ rectricibus albo terminatis: rostro et pedibus nigris.

Long. tota 4·0, alæ 3·1, caudæ 2·5.

Hab. New Grenada, Bogota.

Mus. P. L. S.

Obs. Similis *F. axillari*, sed colore corporis supra nigro nec plumbeo dignoscenda.

5. FORMICIVORA UROSTICTA.

Cinerea, subtus dilutior et magis albescens: plaga gulari elongata nigra: alis nigricanti-cinereis extus cinereo strictissime limbatis, tectricibus autem nigris, albo terminatis: cauda nigra, rectricibus omnibus albo late terminatis; rectricis unæ utrinque extimæ tertia fere parte apicali alba, hoc colore apud alias rectrices gradatim decrescente: rostro nigro, pedibus fuscis.

Long. tota 3·5, alæ 2·0, caudæ 1·2.

Hab. In Brasilia Orientali.

Mus. Brit. et P. L. S.

Obs. A *Formicivora axillari* et aliis affinis colore subtus dilutiore, gula nigra magis restricta et præsertim rectricum apicibus late albis distinguenda.

6. FORMICIVORA BREVICAUDA.

Formicivora brevicauda, Sw., Zool. Journ. ii. p. 148.

♂. *Cinereus unicolor, plaga ovali in gutture et pectore superiore nigra: alis nigricantibus extus cinereo limbatis, harum autem*

tectricibus nigris albo terminatis: cauda brevi, colore nigro-cinerea, rectricum macula subapicali nigra, ipsarum autem apicibus albidis: rostro corneo, pedibus nigris.

♀. *Olivascenti-brunnea, subtus clarior, capite subcinereo gutture albicantiore: tectricum alarium apicibus colore dilutioribus.*

Hab. In Brasilia Orientali prope urbem Bahia (Sw.).

Mus. Brit. et P. L. S.

Obs. Species ab auctoribus cum *F. axillari* et affinis confusa, sed crassitie minore, cauda brevior, colore corporis cinereo unicolore et plaga gutturali ovali bene definita facile dignoscenda.

7. FORMICIVORA HAUXWELLI.

Plumbea, subtus paulo dilutior, mento albescentiore: alis nigris, tectricibus omnibus albo terminatis, duas lineas albas formantibus; secundariis dorso proximis extus caudæ quoque tectricibus et rectricibus ipsis omnibus macula terminali alba præditis: uropygii plumis laxis, elongatis: cauda brevissima: rostro nigricanti-plumbeo, pedibus fuscis.

Long. tota 3·7, alæ 2·1, caudæ 9.

Hab. In Peruv. Orientali (Hauxwell).

Mus. Brit.

8. FORMICIVORA CINERASCENS.

Formicivora cærulescens?, Sclater, P. Z. S. 1854, p. 112 (nec Vieill.).

Pallide cinerascens fere unicolor, subtus dilutior; interscapularium basibus albis: alis nigricanti-brunneis cinereo limbatis; tectricum apicibus albo gutturalis: cauda nigricante, rectricibus omnibus albo terminatis: rostro et pedibus nigris.

Long. tota 6·0, alæ 2·4, caudæ 2·2.

Hab. In Peruv. Orientali, Chamicurros (Hauxwell) et in ripis fl. Napo.

Mus. Brit.

Obs. Similis *F. cærulescenti* ex Brasilia sed rostro fortiore et longiore, cauda brevior et æqualiore, colore corporis inferioris dilutior et campteriis non albis distinguenda.

I formerly referred this bird to Vieillot's *Form. cærulescens*, of which Menetriès has given a figure in his 'Monograph of the Myiothrinæ,' pl. 6. But a comparison of specimens of both species, which are now in the British Museum, has convinced me that these two birds, though much resembling each other in plumage, are essentially distinct, and I have given above the characters by which they may be easily separated.

The example from Chamicurros, which was part of Mr. Hauxwell's fine collection, is not quite mature, and shows brownish colouring beneath and upon the wings. Like *F. cærulescens*, this bird has only ten rectrices.

9. HERPSILOCHMUS PECTORALIS.

Cinereus, dorsi medii plumis albo mixtis; pileo nigro: fronte,

superciliis et lateribus capitis albis : alis nigris, tectricum omnium apicibus albo guttatis, secundariis late, primariis stricte albo extus marginatis : cauda nigra, rectricis unæ utrinque extimæ dimidio apicali et proximarum trium apicibus gradatim decrescentibus albis ; rectricibus duabus intermediis extus anguste albo marginatis et tectricum caudæ apicibus quibusdam eodem colore guttatis : subtus obscure cinereus, plaga magna in pectore antico nigro : rostro plumbeo, mandibula inferiore albicante : pedibus nigris.

Long. tota 5·0, alæ 2·1, caudæ 1·7.

My attention was first called to this species when looking through the specimens of this family in the Museum of the Academy of Nat. Sc. of Philadelphia.

There is also a single specimen in the British Museum, which came, I believe, from the same origin as the one at Philadelphia—that is, from the Massena collection. There is no locality affixed.

In style of colouring this bird seems to come nearest to *H. pileatus*, but it is much larger in size, and the pectoral black patch renders it easily distinguishable from every bird of the family known to me.

10. DYSITHAMNUS XANTHOPTERUS.

Dasythamnus xanthopterus, Burm. Syst. Ueb. d. Th. Bras. iii. p. 81.

♂. *Capite colloque cinereis, fronte, regione superciliari et lateribus capitis albo striolatis : interscapulio et alis extus læte rufis, illo dilutiore ; dorso postico valde plumoso, colore viridescenti-rufo, hujus pennarum basibus cinereis : cauda nigricanti-cinerea, rectricibus extus rufescente marginatis : subtus albus, lateribus cervicis cinereis, ventris autem ochraceis : rostri nigri mandibula inferiore pallida, pedibus nigris.*

♀. *Mari similis sed pileo rufo et subtus magis fusco-flavicans.*

Long. tota 5·5, alæ 2·4, caudæ 2·0.

Hab. In Brasilia Orientali.

Mus. Brit. et P. L. S.

The British Museum possesses the male, and I have a female specimen of this *Dasythamnus*, which is easily recognizable by its deep chestnut-red wings and back ; the same in both sexes. The bend of the wing and whole of the upper coverts are of this colour, and I could hardly, therefore, at first think it possible that this could be the *Dasythamnus xanthopterus* of Burmeister (Syst. Ueb. d. Th. Bras. iii. p. 81), although his description agrees with the female of my species. But recollecting that ξανθός, though commonly used in Natural History as synonymous with the Latin *flavus* and English “yellow,” is also capable of bearing the meaning “auburn,” or even “chestnut ;” it appears to me that the name “*xanthopterus*,” though eminently calculated to mislead as applied to this bird, is perhaps not sufficiently inaccurate to require to be replaced by a new name. I have therefore retained Professor Burmeister’s appellation

for this species. His single example was obtained in the vicinity of New Friburg in the province of Rio de Janeiro. Those in the British Museum and my own collection have the ordinary appearance of Brazilian skins, and are probably from Rio or Bahia.

I do not know what has induced Prof. Burmeister to attempt to change Cabanis's correctly formed generic term *Dysithamnus* into *Dasythamnus*; but in this, as in other instances, that author seems to undervalue the principle of priority, now universally recognized in the application of names in Natural History.

11. THAMNOPHILUS MELANOTHORAX.

Supra intense castaneus, remigibus alarum intus nigricanti-brunneis, lateribus capitis et corpore subtus ad imum pectus atris, hoc colore in ventrem sensim dilutiore: ventre et lateribus olivascanti-brunneis rufo tinctis: cauda unicolore castanea: rostro corneo, pedibus nigro-fuscis.

Long. tota 6·5, alæ 3·2, caudæ 2·8.

Hab. In America Meridionali?

Mus. Brit.

I have never met with but the single example of this curious bird which is in the British Museum. The genus *Thamnophilus* is the only one I know of in which it can be placed; but the bill is more conical and thicker and rather shorter than in the birds of that group, which most nearly approach it in size. There are two white spots on the outer secondaries of the specimen, but these are evidently the results of an incipient albinism.

12. THAMNOPHILUS MELANOCEPS.

Thamnophilus melanoceps, Spix, Av. Bras. ii. pl. 39. fig. 1. p. 28.

Ferrugineo-rufus, subtus clarior: capite toto undique et collo supero nigris: rostro et pedibus nigris.

Long. tota 7·0, alæ 3·2, caudæ 2·4.

Hab. Eastern Peru, Sarayaçu on the Ucayali (*Cast. et Dev.*).

Mus. Paris.

I was not acquainted with this fine species of *Thamnophilus* when I wrote the article on the arrangement of those birds in the 'Edinburgh N. Phil. Journal.' I have since seen several examples in the Museum of the Jardin des Plantes, which were obtained by MM. de Castelnau and Deville at Sarayaçu on the Ucayali. The irides are marked "orange."

DESCRIPTION OF A NEW SPECIES OF ANTELOPE (ORYX BEATRIX) FROM BOMBAY?, LATELY LIVING IN THE MENAGERIE OF THE SOCIETY. BY DR. JOHN EDWARD GRAY, F.R.S., F.L.S., V.P.Z. & ENT. SOC. ETC.

The African genus *Oryx* is divided into two sections, according to the form of the horn. In one, the Kookaam, or Gemsboc (*O.*

gazella), the horns are straight ; in the true *Oryx* (*O. leucoryx*), they are arched and recurved. The former has a black streak along the lower part of the sides, and is found over a large extent of Africa, from the Cape to Abyssinia ; for *O. Biessa* of Rüppell appears to be only a small variety of *O. gazella*, the smaller size depending on some peculiarity in the climate or locality, as is the case with the *Strepsiceros kudu* found in Abyssinia by Capt. Harris, which is only half the size of that inhabiting the Cape of Good Hope. The *O. leucoryx*, on the other hand, which is confined to Senaar and Senegal, is without any indication of the lateral streak.

The animal now under consideration is intermediate between these species ; it has the straight horn of *A. gazella* and the plain colour of *A. leucoryx*, but its dark legs and peculiar white feet at once separate it from either.

The animal was presented to the Society by Capt. John Shepherd of the India House ; it was regarded in the Gardens as a half-grown *Oryx gazella*, and is said to have been brought from Bombay. A pair was shipped from the latter port, but the female died at sea. The male is now in the Collection of the British Museum.

ORYX BEATRIX. The Beatrice.

The horns slender, straight, or only very slightly curved near the tip, annulated nearly to the tip. White ; a spot on the middle of the face, a smaller spot between the base of the horns, a large patch on each cheek, extended above up to the eyes, and united together beneath under the throat ; the knees and front of the fore- and hind-legs, and a large spot on the chest, dark blackish brown ; the legs to the posterior grey-brown ; end of the tail black.

Hab. Bombay, but probably brought from the shores of the Red Sea. Brit. Mus.

This specimen is not half the size of the Gemsboc from the Cape, and is immediately known from it by the distribution of its colours.

In form and size it resembles the true *Oryx* (*O. leucoryx*), but it differs in the straightness of the horn, the size and form of the cheek-spot, and especially in the dark colour of the legs, and the well-marked white ring around the fetlock joint just above the hoof.

The hair is whorled on the middle of the haunches as in the rest of the genus, and the hairs of the back in front of the withers are directed forwards.

MISCELLANEOUS.

On Circulation in Plants. By A. TRÉCUL. (First Part.)

BEFORE putting forward the opinion which my observations have suggested to me with regard to circulation in plants, I think it indispensable to examine the forces to which this phænomenon is